

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A method of configuring resources in an IA-32 computer, comprising:
establishing a remap window at the top of physical memory, the remap window corresponding to a PCI memory address range below 4 GB; and
reporting to an operating system that a portion of the remap window is reserved, the reserved portion corresponding to an AGP aperture within the PCI memory address range.
2. (Original) The method of claim 1, further comprising:
reporting to the operating system that the remainder of the remap window is usable memory.
3. (Original) A method of configuring resources in an IA-32 computer, comprising:
setting a REMAPBASE register to the top of physical memory, and a REMAPLIMIT register to the value in the REMAPBASE register plus the size of a PCI memory address range;
determining a translated AGP aperture address corresponding to the lower end of an AGP aperture minus the address of the top of lower memory plus the value in the REMAPBASE register; and
in response to queries from an operating system to a BIOS, reporting at least three memory ranges as follows:
a first usable range beginning at 4 GB and ending at the translated AGP aperture address;

a reserved range beginning at the top of the first usable range and having a size equal to AGP aperture; and

a second usable range beginning at the top of the reserved range and ending at the value in the REMAPLIMIT register.

4. (Original) A machine-readable storage or transmission medium containing code that, when executed on a computer, causes the computer to perform a method of configuring IA-32 computer resources, the method comprising:

establishing a remap window at the top of physical memory, the remap window corresponding to a PCI memory address range below 4 GB; and

reporting to an operating system that a portion of the remap window is reserved, the reserved portion corresponding to an AGP aperture within the PCI memory address range.

5. (Original) The storage or transmission medium of claim 4, wherein the method further comprises:

reporting to the operating system that the remainder of the remap window is usable memory.

6. (Original) A machine-readable storage or transmission medium containing code that, when executed on a computer, causes the computer to perform a method of configuring IA-32 computer resources, the method comprising:

setting a REMAPBASE register to the top of physical memory, and a REMAPLIMIT register to the value in the REMAPBASE register plus the size of a PCI memory address range;

determining a translated AGP aperture address corresponding to the lower end of an AGP aperture minus the address of the top of lower memory plus the value in the REMAPBASE register; and

in response to queries from an operating system to a BIOS, reporting at least three memory

ranges as follows:

a first usable range beginning at 4 GB and ending at the translated AGP aperture address;

a reserved range beginning at the top of the first usable range and having a size equal to AGP aperture; and

a second usable range beginning at the top of the reserved range and ending at the value in the REMAPLIMIT register.

7. (New) The method of configuring resources in an IA-32 computer as claimed in claim 1, wherein the reporting a portion of the remap window as reserved comprises reporting a portion of the remap window is inaccessible to the operating system.

8. (New) The method of configuring resources in an IA-32 computer as claimed in claim 1, wherein the reporting a portion of the remap window as reserved is performed during operating system boot.

9. (New) The method of configuring resources in an IA-32 computer as claimed in claim 1, further comprising:

reclaiming a portion of physical memory corresponding to the PCI memory address range exclusive of the reported reserved portion.

10. (New) The method of configuring resources in an IA-32 computer as claimed in claim 1, wherein the reporting a portion of the remap window as reserved comprises reporting the reserved portion of the remap window is unassigned to an owner.

11. (New) The method of configuring resources in an IA-32 computer as claimed in claim 3, wherein the reporting a reserved range comprises reporting the range beginning at the top of the first usable range and having a size equal to the AGP aperture comprises reporting the reserved range is inaccessible to the operating system.

12. (New) The method of configuring resources in an IA-32 computer as claimed in claim 3, wherein the reporting a reserved range is performed during the operating system boot.

13. (New) The method of configuring resources in an IA-32 computer as claimed in claim 3, further comprising:

reclaiming a portion of physical memory corresponding to the first usable range and the second usable range.

14. (New) The method of configuring resources in an IA-32 computer as claimed in claim 13, wherein the reclaiming is exclusive of the reserved range.

15. (New) The method of configuring resources in an IA-32 computer as claimed in claim 3, wherein the reporting a reserved range comprises reporting the reserved range is unassigned to an owner.

16. (New) The method of configuring resources in an IA-32 computer as claimed in claim 4, wherein the reporting a portion of the remap window as reserved comprises reporting a portion of the remap window is inaccessible to the operating system.

17. (New) The method of configuring resources in an IA-32 computer as claimed in claim 4, wherein the reporting a portion of the remap window as reserved is performed during operating system boot.

18. (New) The method of configuring resources in an IA-32 computer as claimed in claim 4, further comprising:

reclaiming a portion of physical memory corresponding to the PCI memory address range exclusive of the reported reserved portion.

19. (New) The method of configuring resources in an IA-32 computer as claimed in claim 4, wherein the reporting a portion of the remap window as reserved comprises reporting the reserved portion of the remap window is unassigned to an owner.

20. (New) The method of configuring resources in an IA-32 computer as claimed in claim 6, wherein the reporting a reserved range comprises reporting the range beginning at the top of the first usable range and having a size equal to the AGP aperture comprises reporting the reserved range is inaccessible to the operating system.